



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,980	11/26/2003	John L. Jordan SR.	028647-000005	9496

24239 7590 12/16/2005
MOORE & VAN ALLEN PLLC
P.O. BOX 13706
Research Triangle Park, NC 27709

EXAMINER

LAWRENCE JR, FRANK M

ART UNIT PAPER NUMBER

1724

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/723,980

Applicant(s)

JORDAN ET AL.

Examiner

Frank M. Lawrence

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5, 13-18 and 22 is/are allowed.
- 6) ☒ Claim(s) 6, 7, 9 and 23-28 is/are rejected.
- 7) ☒ Claim(s) 8, 10-12 and 19-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 23, 24 and 26-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 23, 24, 27 and 28 are indefinite because they depend from unrelated claims. To overcome this rejection, claims 23 and 24 should be amended to depend from claim 22, and claims 27 and 28 should be amended to depend from claims 26 and 27, respectively.

3. Claim 26 recites the limitation "the body" in line 17. There is insufficient antecedent basis for this limitation in the claim. To overcome this rejection, "comprising a body" should be inserted after "a cap member" in line 14. This language is assumed for examination and in the indication of allowable subject matter in this office action.

Terminal Disclaimer

4. The terminal disclaimer filed on October 12, 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patent No. 6,692,553 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 1724

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 6, 7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Leith (5,304,125).

7. Leith '125 teaches a system for collecting particles having a diameters from 2-6 microns (see figure 7) from a gas stream by flowing the stream through an impaction sampler comprising a housing (10) defining a chamber (11), an inlet (12) in an upper housing portion (14), an outlet (13) in a lower housing portion (15), a vacuum source connected to the outlet for drawing gas through the housing, and a collecting member (21) coated with a sticking agent disposed inside the housing between the inlet and outlet for collecting particles. The upper and lower housing portions are sealed with O-rings (16) and contain recesses defined by a steel band (44) when combined with the upper portion and an insert (40) shoulder when combined with the lower portion (see figures; col. 5, lines 6-64; col. 8, lines 18-45; col. 9, lines 48-56). The recesses have a smaller width than the collecting member for engaging the member at opposite points when the housing is sealed. The diameter of the inlet opening can be from 8-14 mm (dividing the area by pi and taking the square root) and the distance between the inlet and the tacky surface of the collecting member can be from about 2-15 mm, allowing a ratio of less than 0.5 (see col. 5, lines 15-19 and 58-64). The size distribution of particles captured by the impactor is given in figure 7 with the 50% cutoff size being 3 microns and smaller particles being captured at a lower efficiency.

8. Claim 25 is rejected under 35 U.S.C. 102(b) as being anticipated by Taylor (4,524,811).

Art Unit: 1724

9. Taylor '811 teaches a sampling device including a cap (44) having a pass through opening, a flexible hose (24) connected at one end to the opening in the cap, and a rigid tube (28) connected to the free end of the hose (see figures, col. 2, lines 54-68, col. 4, lines 4-19).

Allowable Subject Matter

10. Claims 1-5, 13-18 and 22 are allowed.

11. Claim 26 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

12. Claims 23, 24, 27 and 28 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

13. The following is an examiner's statement of reasons for allowance: The outstanding double patenting rejection has been overcome by the submission of a proper terminal disclaimer, and is withdrawn. The examiner agrees with applicants' arguments regarding claims 1, 13, 15 and their dependents. Specifically, the prior art of record fails to disclose or suggest a motivation for providing a ratio of the distance between the inlet opening and the adhesive-coated surface to the diameter of the inlet opening of less than about 0.1, or a method as recited in claims 13 and 15 wherein the flexible hose is connected at one end to the opening in the cap member. With respect to claim 22, the prior art fails to disclose the recited arrangement wherein the depth of the slots is less than the thickness of the collecting member so that the inner surface of the first portion engages a portion of the collecting member when sealingly connected to the second portion. With respect to claim 26, the prior art fails to disclose or suggest the recited cap member having a flexible hose connected at one end to the opening in the cap, a rigid tube

Art Unit: 1724

connected to the free end of the hose, and the cap opening is in direct fluid contact with the inlet opening in the recited housing.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

14. Claims 8, 10-12 and 19-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

15. Applicant's arguments filed October 12, 2005 have been fully considered but they are not persuasive. The examiner agrees with all of applicants' arguments except those relating to the 35 USC 102(b) rejection over Leith, which is maintained in this office action. Applicant argues that Leith fails to teach a circular inlet opening and a distance between the inlet opening and the adhesive-coated surface of less than about 0.08 inches, however it is submitted that the disclosed distance is from about 2-15 mm, and 2 mm (0.0787 inches) as an endpoint is disclosed with sufficient specificity to anticipate a distance of less than about 0.08 inches (2 mm). This distance taken with any diameter of the circular inlet in the disclosed range of 8-14 mm will result in a ratio of less than 0.5.

16. The Taylor patent is used to reject new claim 25.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 571-272-1161. The examiner can normally be reached on Mon-Thurs 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1724

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank M. Lawrence
Primary Examiner
Art Unit 1724

fl

Frank Lawrence
12-10-05